

WHAT IS CLAIMED IS:

1. An audio enhancement apparatus operative upon left and right stereo input signals provided by a stereo reproduction device for playback through a speaker system having a fixed location within an audio reproduction environment, the enhancement apparatus modifying the stereo input signals to obtain an improved stereo image by compensating for acoustic limitations created when the input signals are reproduced by the speaker system within the audio reproduction environment, the audio enhancement apparatus comprising:

a stereo image correction circuit receiving the left and right stereo input signals and modifying said input signals using at least a first frequency correction circuit within a first frequency range and a second frequency correction circuit within a second higher frequency range on each of said input signals to generate corresponding energy-corrected left and right stereo signals, wherein the first frequency range is processed independently from the second higher frequency range, said energy-corrected left and right signals creating a corrected spatial response, said corrected spatial response creating an apparent sound image which relocates the perceived position of said speaker system to an apparent position when heard by a listener;

a stereo image enhancement circuit receiving the energy-corrected left and right stereo signals and generating enhanced left and right stereo signals to provide a spatially enhanced apparent sound image which is perceived by said listener to substantially emanate from said apparent position when said enhanced left and right stereo signals are reproduced through said speaker system; and

wherein said energy-corrected left and right signals are characterized by a first ambient component, and said enhanced left and right stereo signals are characterized by a second ambient component, said second ambient component selectively equalized with respect to said first ambient component.